



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,330	02/20/2001	Katsuyosi Yamamoto	107346-00016	1600

7590 09/12/2005

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
Suite 600
1050 Connecticut Avenue, N.W.
Washington, DC 20036-5339

EXAMINER

VIEAUX, GARY

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,330

Applicant(s)

YAMAMOTO ET AL.

Examiner

Gary C. Vieaux

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 3-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Species I directed to Figure 1, readable on claims 1-2 in
5 the reply filed on July 15, 2005 is acknowledged. Because applicant did not distinctly
and specifically point out supposed errors in the restriction requirement, the election has
been treated as an election without traverse (MPEP §818.03(a)).

Information Disclosure Statement

10 The information disclosure statement (IDS) submitted on the following date is in
compliance with the provisions of 37 CFR 1.97 and is being considered by the
Examiner: February 20, 2001.

Specification

15 Claim 1 is objected to because of the following informalities: Lines 9 and 11 of
claim 1 include improperly employed articles, as in "an signal" instead of the
grammatically correct "a signal".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

20 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by
Ohsawa et. al. (US 6,903,768.)

Regarding claim 1, Ohsawa teaches a similar pixel array (fig.1), the array having a photo sensitive pixel region and an optical black pixel region, with each pixel having a connected photodiode (fig. 1, indicator 8) and reset switch (fig. 1, indicator 17), and the array also having a readout circuit (fig.1 and fig. 12) which includes a black clamp circuit (fig. 12, indicator 72), and wherein the optical black region of the array contains a potential averaging line commonly connected to the reset nodes of the pixels (fig. 1, indicator 30.) It is noted that the Examiner applies the limitation “commonly connected” in its broadest interpretation, as the breadth of the connection in the claim, as it is currently written, is not found to be clearly limited or restricted.

Regarding claim 2, Ohsawa teaches all of the limitations of claim 2 (see the 103(a) rejection to claim 1 supra) including wherein the pixels including the potential averaging line are located outside the photo sensitive pixel region in a horizontal direction (fig. 1), and clamping is performed by a black clamp circuit (fig. 12, indicator 72.)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hashimoto et al. (US 6,627,896) discloses an optical black region containing
5 commonly connected pixels for the purpose of averaging a signal.

Lauxtermann et al. (US 6,452,153) discloses pixels commonly connected for the purpose of averaging a signal.

Fossum et al. (US 5,949,483) discloses pixels commonly connected for the purpose of averaging a signal.

10 Miyazaki et al. (US 6,130,712) discloses optical black pixels employed in connection with signal averaging.

Contact

Any inquiry concerning this communication or earlier communications from the
15 examiner should be directed to Gary C. Vieaux whose telephone number is 571-272-7318. The examiner can normally be reached on Monday - Friday, 8:00am - 4:00pm.

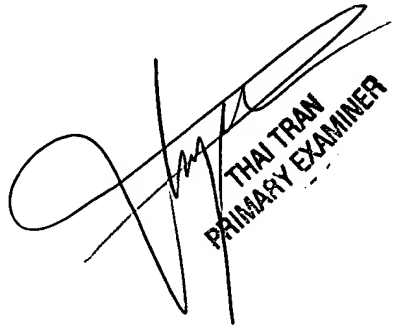
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Q. Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary C. Vieaux
Examiner
Art Unit 2612

10 Gcv2



THAI TRAN
PRIMARY EXAMINER